SECTION 706
LIME

Description. These Specifications cover lime requirements for lime treatment of soils in Section 307.

706.01. HYDRATED LIME.

(a) **Definition.** Hydrated lime for stabilization shall consist essentially of a calcium hydroxide (with a lesser amount of calcium oxide, magnesium oxide, and magnesium hydroxide) made from a dry powder obtained by treating quick-lime with enough water to satisfy its chemical affinity for water under the conditions of its hydration.

(b) **Chemical Composition.** When tested under the appropriate sections of ASTM C 25, the lime shall conform to the following requirements:
Available calcium hydroxide.
Available lime index (as is basis) expressed as $Ca(OH)_2$ - Not less than 90 percent.

(c) **Fineness.** When tested under the appropriate sections of ASTM C 110, the lime shall conform to the following requirements:

SIEVE SIZE	PERCENT PASSING
No. 20 (850 µm)	99 - 100
No. 200 (75 µm)	80 - 100

706.02. QUICK LIME.

(a) **Definition.** Quick lime for stabilization purposes shall consist of a calcined material, the major part of which is calcium oxide or calcium oxide in natural association with a lesser amount of magnesium oxide capable of slaking with water.

(b) **Chemical Composition.** When tested under the appropriate sections of ASTM C 25, the lime shall conform to the following requirements:
Available calcium hydroxide expressed as calcium oxide.
Available lime index (as is basis) expressed as CaO - not less than 90 percent.

(c) **Fineness.** When tested under the appropriate sections of ASTM C 110, the lime shall conform to the following requirements:

PROPERTY	LIMITS
Slaking Temperature Rise, °C, minimum	40
Total active Slaking Time, minutes, maximum	20

When tested in accordance with method OHD L-28 the lime shall conform to the following requirements:

SIEVE SIZE	PERCENT PASSING
5/8 inch (16.0 mm)	95-100
No. 200 (75 µm)	0-15

706.03. BY-PRODUCT LIME.

By-product lime will be tested under the appropriate sections of ASTM C 25 to determine the available lime index (by rapid sugar method) expressed as available calcium hydroxide $Ca(OH)_2$.

Calculations will be based on the dry mass of the material. Sufficient by-product lime shall be required to provide an equivalent amount of available lime based on 90 percent availability per ton (metric ton) (dry mass) of hydrated lime.

706.04. AGRICULTURAL LIMESTONE.

Agricultural limestone shall be a high calcic or dolomitic limestone having a neutralization value of at least 80 percent of calcium carbonate. The neutralization value and sieve analysis shall be in accordance with ASTM C 602. The material shall be free from harmful quantities of toxic salts and other objectionable matter.

The fineness shall conform to the following requirements:

SIEVE SIZE	PERCENT PASSING
No. 4 (4.75 mm)	100
No. 8 (2.36 mm)	90-100
No. 60 (250 µm)	30-100

SECTION 707
MICRO SURFACING

707.01. DESCRIPTION.

These Specifications cover the materials for use in the construction of micro surfacing.

707.02. MATERIALS.

(a) **Approval of Materials.** Prior to use, samples of all materials proposed to be used under these Specifications shall be submitted to the Materials Division for tests. The mix design will be prepared by the contractor and submitted to the Materials Division, with applicable worksheets and data, for approval. The mix design shall comply with these Specification requirements and establish the job-